# (19)日本国特許庁 (JP) (12) 公開特許公報 (A)

(11)特許出願公開番号

# 特開平7-30789

(43)公開日 平成7年(1995)1月31日

(51) Int.Cl.6

識別記号

庁内整理番号

FΙ

技術表示箇所

HO4N 5/225

F

審査請求 未請求 請求項の数2 OL (全 3 頁)

(21)出願番号

特願平5-173973

(71)出顧人 000005108

(22)出願日

平成5年(1993)7月14日

株式会社日立製作所 東京都千代田区神田駿河台四丁目6番地

(72) 発明者 東 二郎

茨城県勝田市稲田1410番地株式会社日立製

作所AV機器事業部内

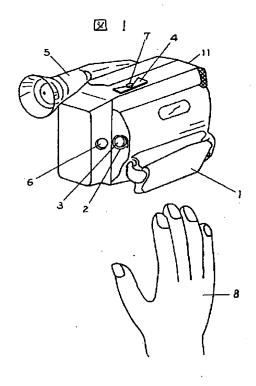
(74)代理人 弁理士 小川 勝男

# (54) 【発明の名称】 カメラ一体型VTR

### (57)【要約】

【構成】被写体を撮る際に使用頻度の高い釦を本体を支 持する手の親指側面で操作できる場所に配置する。

【効果】被写体を撮る時ズーム操作、記録開始、停止、 記録スタンバイモード操作の他にカメラ撮りで使用する 日付け入れ、逆光補正等の操作を本体を支持する手の操 作のみで行う事ができる。



#### 【特許請求の範囲】

【請求項1】 ズーム可能なレンズ系を有し、片手での撮 影が可能で、被写体撮影時、カメラのグリップ部をグリ ップした状態でこのグリップしている手のみでズーム操 作および記録開始操作、記録準備操作以外のカメラ撮影 に使用頻度の高い釦をカメラ本体を支える右手の親指側 面で操作できうる操作釦を本体側面に配置する事を特徴 とするカメラー体型VTR。

【請求項2】 ズーム可能なレンズ系を有し、片手でズー ムアップ, ダウン動作を行うことができ、ズームアップ 10 図1は本発明の説明図を示す。カメラー体型VTRは一 を光学およびメモリーを有して、メモリーデータの処理 によりズームアップできるカメラー体型VTRで、ズー ムアップダウン釦の間にメモリーによるズームアップ操 作を行う釦を配置する事を特徴とするカメラ一体型VT

#### 【発明の詳細な説明】

### [0001]

【産業上の利用分野】一般的に被写体を撮る際、記録開 始スイッチ及びズーム釦を除くカメラ撮りに使用するそ の他の釦はカメラ本体を支持しない左手で操作するよう 釦が配置してあった。本発明で使用頻度の高い釦を本体 を支持する手の親指側面で操作できる場所に配置し、ビ ューファインダを覗きながら釦の確認を行わず、誤操作 を回避する事ができる。

#### [0002]

【従来の技術】実開平4-112566号公報は、カメ ラ本体のグリップした状態でこのグリップしている手の 指の届く範囲にパワーズーム釦およびマクロ釦を設けた 事を特長としている。本目的はズームアップダウンの他 にマクロモードにする動作を片手で行える事である。と ころで、カメラ撮りするときは右手に本体を持ち、人差 し指または中指でズームアップおよびズームダウンを行 い、親指で記録開始および記録スタンバイギーを行い、 本公開の目的にあるよう、その他のカメラの操作、例え ば日付け時間入れ、逆光補正、その他のカメラ操作キー はカメラを支えない左手で操作を行っていた。

#### [0003]

【発明が解決しようとする課題】本発明はカメラー体型 VTRにおいて被写体を撮る時に、ズームや記録開始お よびカメラスタンバイ操作釦以外の撮影時に使用する釦 40 はカメラ本体を支えない左手で行っていた。しかしなが ら、ファインダを覗きながらの左手の操作は操作しよう とする釦を探して操作する必要があり、誤操作すること があった。

# [0004]

【課題を解決するための手段】上記問題を解決するため に、カメラを支える手のみでズーム操作および記録開始 操作、記録準備操作以外のカメラ撮影に使用頻度の高い 釦をカメラ本体を支える右手の親指側面で操作できうる 操作釦を本体に設ける。

#### [0005]

【作用】カメラを支える手のみでズーム操作および記録 開始操作、記録準備操作以外のカメラ撮影に使用頻度の 高い釦をカメラ本体を支える右手の親指側面で操作でき うる操作釦を本体に設け、被写体を撮影するときビュー ファインダを覗きながら使用するキーを確認する事無く 操作ができる。

#### [0006]

### 【実施例】実施例1

般に効き手でグリップ部1をグリップした状態つまり支 持する右手で本体を支え、右手親指で記録スタンバイキ ー 2 、記録開始釦 3 、右手人差し指および中指でズーム アップダウンを行うズーム操作釦4の操作を行う。被写 体撮影時必要となる釦は記録開始釦3、記録スタンバイ キー2、ズーム操作釦4の他に使用するカメラ撮影時操 作釦6、例えば撮影画の中に撮影の日時時間、逆光補 正、画面のフェードインフェードアウト、撮影途中にタ イトルなどを撮影画に挿入するスーパーインポーズ、手 振れ補正のオン/オフ、撮影内容の確認するために用い るエディットサーチ、ホワイトバランス手動切り換え、 フォーカス手動切り換え、シャッター手動切り換え等と ほとんど本体を支えない左手で操作する。しかし、被写 体撮影時はビューファインダ5を覗きながら撮影するこ とが主であるため、本体を支えない左手の操作は、ビュ ーファインダ5から一旦目を離し、釦の確認をしてしな いと誤操作してしまう。そこで、従来ある記録開始釦 3、記録スタンバイスイッチ2、ズーム操作釦4の他に 上記示した操作に用いる釦を親指側面で操作できる釦を 30 本体側面に設け、撮影時ビューファインダを覗きながら 本体を支える右手の操作のみで、目的の操作を行うこと ができる。

## 【0007】 実施例2

カメラー体型VTRのズーム操作はグリップ部1をグリ ップした状態で、本体を支える右手の人差し指、中指を 用いて行われる。ズームの方法としてメモリーを用い、 そのデータ処理によるディジタルズームが有るが、瞬時 にズームアップダウンするには本方式を用いる事は効果 的であり、瞬間ズーム、インスタントズームと呼ばれ る。本操作釦瞬間ズーム釦7を図3で示すズームアップ **釦9とズームダウン釦10の間に設け本体を支える右手** で行う事ができる。

## [0008]

【発明の効果】本発明によれば、被写体を撮る際カメラ 本体を支持する右手の親指側面の操作で、ビューファイ ンダを覗きながら誤操作無しに、カメラ操作を行う事が できる。

### 【図面の簡単な説明】

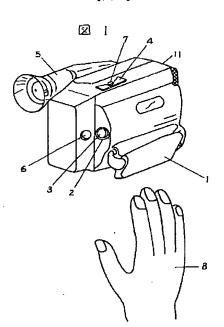
【図1】本発明の一実施例を示すカメラー体型VTRの 50 斜視図である。

【図2】本発明の一実施例を示すカメラ一体型VTRの 斜視図である。

【図3】本発明の一実施例を示すズーム釦部の説明図である。

【符号の説明】

【図1】



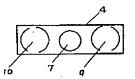
1…グリップ部、2…記録スタンバイキー、3…記録開始釦、4…ズーム操作釦、5…ビューファインダ、6…カメラ撮影時操作釦、7…瞬間ズーム釦、8…手、9…ズームアップ釦、10…ズームダウン釦、11…カメラ本体。

【図2】

【図3】

図 3

図 2



# PATENT ABSTRACTS OF JAPAN

(11)Publication number:

07-030789

(43) Date of publication of application: 31.01.1995

(51)Int.CI.

H04N 5/225

(21)Application number: 05-173973

(71)Applicant: HITACHI LTD

(22)Date of filing:

14.07.1993

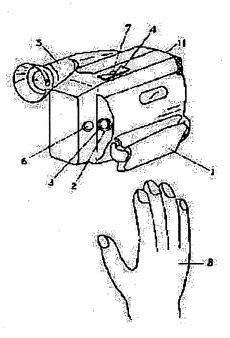
(72)Inventor: AZUMA JIRO

### (54) VTR WITH BUILT-IN CAMERA

### (57)Abstract:

PURPOSE: To avoid erroneous operations without confirming a button while viewing through a viewer frame by arranging the button provided with the high frequency of use at a certain place so as to operate that button with the side of the thumb of a hand supporting a main body.

CONSTITUTION: A recording start button, recording standby key, zoom operating button and camera photographing time operating button or the like required for photographing an object are conventionally operated by a left hand which does not almost support the main body. Since photographing is performed while viewing through a viewer frame 5 when photographing the object, however, the operation of the left hand not supporting the main body is made wrong provided the eye is temporarily separated from the viewer frame 5 and the button is confirmed. Therefore, the main body is supported with a right hand 8 and a grip part 1, and the operation is performed by the thumb of the right hand. A



recording standby key 2 and a recording start button 3 are operated by the forefinger and middle finger of the right hand. A zoom operating button 4 for zoom up/down or the like is provided on the side face of the main body so as to be operated with the right hand 8 supporting the main body while viewing through the viewer frame 5 at the time of photographing.

## **LEGAL STATUS**

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision

of rejection]
[Date of requesting appeal against examiner's decision of rejection]
[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office

JPO and NCIPI are not responsible for any damages caused by the use of this translation.

- 1. This document has been translated by computer. So the translation may not reflect the original precisely.
- 2.\*\*\*\* shows the word which can not be translated.
- 3.In the drawings, any words are not translated.

# **CLAIMS**

[Claim(s)]

[Claim 1] the camcorder/movie characterize by to arrange the operating button which can operate \*\* with high operating frequency on the thumb side face of the right hand supporting the body of a camera to the camera photography of those other than zoom actuation and recording start actuation, and record housekeeping operation on the side face of a body only by this grip hand where it had the lens system in which a zoom be possible, photography single hand be possible and the grip section of a camera be grip at the time of photographic subject photography.

[Claim 2] The camcorder/movie characterized by arranging \*\* which has the lens system in which a zoom is possible, can perform zoom-in and down actuation single hand, and performs zoom-in actuation by memory between zoom up-and-down \*\* with the camcorder/movie which has optics and memory and can zoom in zoom-in by processing of memory data.

JPO and NCIPI are not responsible for any damages caused by the use of this translation.

- 1. This document has been translated by computer. So the translation may not reflect the original precisely.
- 2.\*\*\* shows the word which can not be translated.
- 3.In the drawings, any words are not translated.

# **DETAILED DESCRIPTION**

# [Detailed Description of the Invention]

[0001]

[Industrial Application] When taking a picture of a photographic subject generally, \*\* was arranged so that \*\* of others which are used for photographing except a recording start switch and zoom \*\* might be operated with left hand which does not support the body of a camera. It can arrange by this invention in the location which can operate \*\* with high operating frequency on the thumb side face of the hand which supports a body, and \*\* cannot be checked, looking into a viewfinder, but an operation mistake can be avoided.

[0002]

[Description of the Prior Art] JP,4-112566,U is characterized by preparing power zoom lens \*\* and macro \*\* in the range which this gripped digiti manus reaches after the body of a camera has gripped. This purpose is being able to perform single hand actuation made into the macro mode other than zoom up and down. By the way, as it has a body in a right hand when photographing, and zoom-in and a zoom down were performed by the index finger or the middle finger, the thumb performed a recording start and a record standby key and it was in the purpose of this public presentation, it put in actuation of other cameras, for example, the date time, and backlight amendment and other camera actuation keys were operating it with left hand which does not support a camera.

[Problem(s) to be Solved by the Invention] When this invention took a picture of a photographic subject in a camcorder/movie, the left hand which does not support the body of a camera was performing \*\* used at the time of the photography of those other than a zoom, a recording start, and a camera standby operating button. However, actuation of a left hand while looking into a finder needed to be operated in search of \*\* which it is going to operate, and might carry out the operation mistake.

[Means for Solving the Problem] In order to solve the above-mentioned problem, the operating button which can operate \*\* with high operating frequency on the thumb side face of the right hand supporting the body of a camera to the camera photography of those other than zoom actuation and recording start actuation, and record housekeeping operation is prepared in a body only by the hand supporting a camera.

[0005]

[Function] The operating button which can operate \*\* with high operating frequency on the thumb side face of the right hand supporting the body of a camera to the camera photography of those other than zoom actuation and recording start actuation, and record housekeeping operation is prepared in a body only by the hand supporting a camera, and actuation is possible, without checking the key used while looking into a viewfinder, when photoing a photographic subject.

[0006]

[Example] Example 1 <u>drawing 1</u> shows the explanatory view of this invention. The zoom operating button 4 which supports a body according to the condition, i.e., the right hand to support, which was

generally effective as for the camcorder/movie and gripped the grip section 1 by hand, and performs zoom up and down with the right-hand thumb by the record standby key 2, the record starting button 3, the right-hand index finger, and the middle finger is operated. \*\* which is needed at the time of photographic subject photography at the time of the camera photography used besides the record starting button 3, the record standby key 2, and the zoom operating button 4 An operating button 6, for example, time time amount of photography in photography drawing, Backlight amendment, the fade-in fade-out of a screen, the superimposition that inserts a title etc. in the middle of photography at photography drawing, In order that ON/OFF of hand deflection amendment, and the contents of photography may check, it is operated with the edit search to be used, white balance manual switchover, focal manual switchover, shutter manual switchover, etc. and left hand that hardly supports a body. However, since it is main at the time of photographic subject photography to take a photograph, looking into a viewfinder 5, actuation of the left hand which does not support a body once lets a viewfinder 5 out of sight, and if \*\* is checked and it does not carry out, the operation mistake of it will be carried out. Then, \*\* which can operate \*\* used for the actuation which \*\*\*\*\*\*(ed) conventionally besides a certain record starting button 3, the record standby switch 2, and the zoom operating button 4 on a thumb side face is prepared in the side face of a body, and the purpose can be operated only by actuation of the right hand supporting a body, looking into a viewfinder at the time of photography.

[0007] Zoom actuation of example 2 camcorder/movie is in the condition which gripped the grip section 1, and is performed using the index finger of the right hand supporting a body, and the middle finger. Although there is a digital zoom by the data processing using memory as the approach of a zoom, it is effective to use this method for carrying out zoom up and down in an instant, and it is called a zoom and an instant zoom at the moment. The right hand which prepares between zoom-in \*\* 9 which shows zoom \*\* 7 by drawing 3 at this operating button moment, and zoom down \*\* 10, and supports a body can perform.

[8000]

[Effect of the Invention] According to this invention, camera actuation can be performed without an operation mistake, looking into a viewfinder by actuation of the thumb side face of the right hand which supports the body of a camera, in case a picture of a photographic subject is taken.

JPO and NCIPI are not responsible for any damages caused by the use of this translation.

- 1. This document has been translated by computer. So the translation may not reflect the original precisely.
- 2.\*\*\*\* shows the word which can not be translated.
- 3.In the drawings, any words are not translated.

# **DESCRIPTION OF DRAWINGS**

[Brief Description of the Drawings]

[Drawing 1] It is the perspective view of the camcorder/movie in which one example of this invention is shown.

[Drawing 2] It is the perspective view of the camcorder/movie in which one example of this invention is shown.

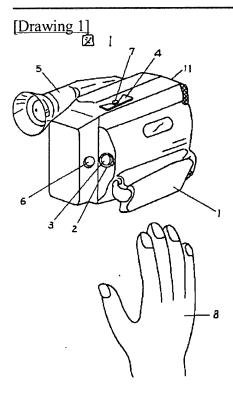
[<u>Drawing 3</u>] It is the explanatory view of a zoom button part showing one example of this invention. [Description of Notations]

1 [-- A zoom operating button, 5 / -- A viewfinder, 6 / -- It is an operating button and 7 at the time of camera photography. / -- Moment zoom \*\*, 8 / -- A hand, 9 / -- Zoom-in \*\*, 10 / -- Zoom down \*\*, 11 / -- Body of a camera. ] -- The grip section, 2 -- A record standby key, 3 -- A record starting button, 4

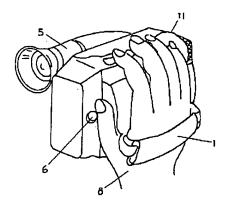
JPO and NCIPI are not responsible for any damages caused by the use of this translation.

- 1. This document has been translated by computer. So the translation may not reflect the original precisely.
- 2.\*\*\* shows the word which can not be translated.
- 3.In the drawings, any words are not translated.

# **DRAWINGS**



[Drawing 2] 🔣 2



[Drawing 3]

